



Memorandum of Agreement

between

The U.S. Army Engineer
Research and Development
Center

and

The U.S. Military Academy

18 February 2005

**MEMORANDUM OF AGREEMENT
BETWEEN
THE U.S. MILITARY ACADEMY
AND
THE U.S. ARMY CORPS OF ENGINEERS
ENGINEER RESEARCH AND DEVELOPMENT CENTER**

1. **PURPOSE.** This Memorandum of Agreement (MOA) establishes policies and procedures to facilitate cooperation and coordination for joint research and information exchange between the U.S. Military Academy (USMA) and U.S. Army Corps of Engineers Engineer Research and Development Center (ERDC).
2. **OBJECTIVES.**
 - a. Better utilize the potential at USMA to contribute to the solution of problems being addressed by the ERDC for the U.S. Army.
 - b. Provide opportunities for USMA faculty and cadets to learn and develop professionally.
 - c. Provide exposure for USMA faculty and cadets to current Army problems being addressed by the ERDC.
 - d. Provide exposure for USMA faculty and cadets to ERDC facilities, personnel, and programs.
 - e. Provide exposure for ERDC personnel to USMA programs, personnel, and future Army leaders.
 - f. Provide sabbatical opportunities for ERDC personnel.
 - g. Provide additional opportunities for officers in graduate school to conduct research that can be continued during their teaching tour at USMA.
 - h. Improve the visibility of ongoing ERDC-USMA research at USMA, ERDC, and throughout the Army.
 - i. Provide a single point of contact at ERDC and at USMA to address issues and coordinate efforts regarding ERDC-USMA research.
3. **ACTIVITIES.** Under this MOA, ERDC and USMA will participate in activities to promote joint research and information exchange. These activities include but are not limited to the following efforts under this MOA:
 - a. ERDC sponsorship of research pursuant to work plans submitted by USMA faculty and cadets.
 - b. ERDC hosting of visiting faculty and cadets for summer research at ERDC facilities.
 - c. USMA hosting a periodic Visiting Research Engineer from the ERDC research staff.
 - d. USMA faculty providing input on Army research needs.

4. AGREEMENTS

a. ERDC agrees to:

- (1) Designate an ERDC POC to coordinate this agreement. Details of the envisioned duties are given at Tab A.**
- (2) Provide funding and other support to USMA for selected research Work Plans (WP) as set forth in Article 5 of this MOA. The scope of specific research projects and joint activities will be negotiated and documented in Work Plans as prescribed in Article 6 of this MOA. The level of funding will be negotiated at the beginning of each USMA Academic Year (AY) based on the availability of funds, the specific activities proposed for the next AY, and the results achieved in previous AYs.**
- (3) Periodically nominate a member of the ERDC staff to serve as a Visiting Research Engineer at USMA for an 11-month period pending available resources. Details of this activity are provided at Tab B.**

b. USMA agrees to:

- (1) Assign a senior member of the faculty to serve as the USMA POC. Details of the envisioned duties are given at Tab A.**
- (2) Provide access to USMA personnel and existing computing and laboratory equipment to support research activities.**
- (3) Provide adequate office and laboratory space, services, and other facilities required to support research activities.**
- (4) Provide adequate clerical support to the activities under this MOA.**
- (5) Establish a separate cost accounting code to manage funds received from the ERDC and provide accounting support.**
- (6) Provide for public presentation of research results when appropriate.**
- (7) Provide a written record annually of the research performed.**
- (8) Make each participating USMA faculty member's supervisor aware of the research being proposed and the time required to conduct that research.**
- (9) Include cadet participation in research activities whenever possible.**
- (10) Encourage officers in graduate school to participate in this program where appropriate.**
- (11) Periodically provide a Visiting Research Engineer position for a qualified member of the ERDC staff. More details on this aspect of the agreement are provided at Tab B.**

5. SPECIFIC PROVISIONS

- a. Conduct of Research:** During the Fall semester, the ERDC and USMA POCs will coordinate the identification of research topics of mutual interest with input from their respective organizations. They will publicize the topics within their organizations

and match interested ERDC researchers with interested USMA faculty/cadets. Discussions between the ERDC researchers and USMA faculty/cadets will lead to the development of research Work Plans (WPs) that address the identified research topics. When possible, the WPs will include cadet participation, primarily through the existing Academic Individual Advanced Development (AIAD) program, cadet capstone projects, and Advanced Individual Study courses at USMA. In addition, officers in graduate school with a follow-on assignment to USMA will be encouraged to participate in research under this MOA. Completed research WPs will be submitted to the USMA and ERDC POCs for coordination of the review and selection process.

- b. **Public Dissemination of Research Findings:** USMA researchers, in conjunction with their ERDC research counterparts, will coordinate the content of proposed research publication to ensure that no classified, confidential, or proprietary information is inadvertently released. Researchers will be encouraged to disseminate products of their research through publications and presentations while affording the appropriate credit to their partner's programs and personnel.

6. WORK PLANS. The specific work to be performed under this MOA will be set forth in Work Plans (WPs) agreed to by the parties. The funding party will provide no funds, materials, or services without an approved WP. Each WP shall contain the following:

- a. Project background, project description, and research objective.
- b. A scope of work (SOW) detailing the work items to be accomplished by each participant.
- c. Project deliverables.
- d. The funding, materials, and/or services required to accomplish the work.
- e. A description of the obligations of the parties with respect to the requested funds, materials and/or services.
- f. Project duration and milestones.
- g. Project Manager for each party.

7. PROJECT MANAGERS. ERDC and USMA will each assign a Project Manager (PM) for each WP. These will generally be the ERDC and USMA researcher(s) who developed the project. The PMs shall regularly meet, or otherwise communicate to

- a. Schedule work to be performed pursuant to the specific WP.
- b. Review and evaluate the progress of the work being performed.
- c. Monitor the expenditure of funds.
- d. Draft and coordinate publication and presentation of completed work.
- e. Propose, draft, and coordinate the issuance of new WPs.

The PMs may make minor changes to a WP via written amendment to the original WP signed by both PMs. However, major changes to WPs must be in writing and signed by

authorized representatives of ERDC and USMA. This MOA will control in the event of a conflict in terms between the MOA and WP.

8. DISPENSATION OF FUNDS. In general, the funding party will MIPR funds to the performing party. The USMA POC will be responsible for distributing funds received in support of research WPs. The individual USMA PM will execute the spending of funds in his/her account. Any funds provided for the purpose of promoting this research relationship (e.g., develop new projects, help new researchers establish contact, etc.) will be managed directly by the USMA POC.
9. POINTS OF CONTACT.

a. USMA

COL Allen C. Estes
CE Division Director, Department of Civil & Mechanical Engineering
MADN-CME, 3rd Floor Mahan Hall Building 752
West Point, NY 10996
(845) 938-4607
Allen.Estes@usma.army.mil

b. ERDC


Dr. Paul F. Mlakar
Senior Research Engineer
ATTN: CEERD-GV-Z
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Paul.F.Mlakar@erdc.usace.army.mil

Either Party may change its POCs at any time by providing written notice to the other POC and to the signatories of this MOA.

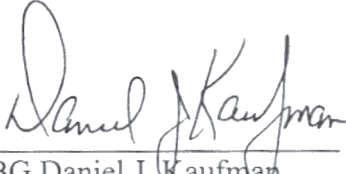
10. AMENDMENT, MODIFICATION, AND TERMINATION.

- a. This MOA may be amended or modified only by written mutual agreement between the parties.
- b. This MOA may be terminated or cancelled at anytime by mutual consent of the parties by giving at least 180 days advance notice.
- c. Three years after the signing of this MOA, the parties will convene a formal review to assess its merits and provide a written report and recommendations to the ERDC Director and to the USMA Dean of the Academic Board.

11. EFFECTIVE DATE. This MOA will be effective on the date when the last signatory has signed it.



James R. Houston, Ph. D. 2/18/05
Director Date
Engineer Research and Development Center
U.S. Army Corps of Engineers
Vicksburg, MS



BG Daniel J. Kaufman 18 Feb 05
Dean of the Academic Board Date
U.S. Military Academy
West Point, NY

TAB A – DUTIES OF POINTS OF CONTACT

- 1 **PURPOSE.** The USMA will provide a senior faculty member to serve as its Point of Contact (POC) for this MOA. Likewise, ERDC will provide a senior researcher to serve as its POC for this MOA. These POCs will have the overall responsibility for successful execution of this agreement.
- 2 **DUTIES.**
 - a. USMA and ERDC POCs jointly will:
 - (1) Coordinate interactions between USMA and ERDC laboratories to identify research topics that support ERDC interests and that are appropriate for USMA.
 - (2) Facilitate communications between ERDC researchers and USMA faculty and cadets to identify projects of mutual interest.
 - (3) Coordinate the collection and review of Work Plans.
 - (4) Process Work Plans and funding issues in a timely fashion.
 - (5) Exercise oversight on ERDC-sponsored research at USMA.
 - (6) Develop and maintain an assessment system for the activities under this agreement.
 - b. USMA POC will:
 - (1) Maintain the budget for USMA activities under this agreement, coordinate separate accounts for funds designated for specific Work Plans and directly manage funds that support efforts to promote and manage activities under this agreement.
 - (2) Coordinate the collection and review of abstracts and reports of completed work during September and October of each year.
 - (3) Collect, summarize, and disseminate, on an annual basis, the results of research performed under this agreement.
 - (4) Encourage the public presentation of research results.
 - (5) Advertise and promote the USMA-ERDC research effort across the entire academy.
 - (6) Coordinate with ERDC on opportunities for officers in graduate school who may be interested in participating in activities under this agreement.

TAB B - VISITING RESEARCH ENGINEER POSITION

OBJECTIVE. The objective of the Visiting Research Engineer Position (VREP) is to further enrich the USMA faculty while offering ERDC personnel an opportunity to return to an academic environment to teach and continue research. This benefits the cadets through the professional experience that the visiting research engineer brings to the classroom, and potentially through research performed with the visiting research engineer in advanced individual study courses, cadet capstone projects, or Academic Individual Advanced Development experiences. The academy faculty also benefit through collaboration with the Visiting Research Engineer. The Visiting Research Engineer also benefits through the unique opportunity to further his or her personnel and professional development by enjoying the benefits of a sabbatical and having the opportunity to teach students in the classroom.

2. **GENERAL CONDITIONS.** The Visiting Research Engineer will be expected to participate in the appropriate USMA department's summer instructor training program and will teach one or two sections of one course per academic term. The Visiting Research Engineer will also perform research on a topic agreed upon with his/her supervisors. In order to qualify, the Visiting Research Engineer must have a doctoral or master's degree in appropriate field, and strong desire to teach and improve his/her teaching skills.
3. **RESPONSIBILITY OF PARENT INSTITUTIONS.**
 - a. USMA and ERDC jointly will:
 - (1) Promote the VREP with appropriate USMA academic departments and ERDC personnel.
 - (2) Provide a point of contact and develop procedures appropriate to each institution to help administer the VREP activity.
 - (3) Develop a means to assess the value of the VREP to each institution.
 - b. USMA will:
 - (1) Serve as advisor to ERDC on assessment of teaching qualifications and research suitability for ERDC applicants to the VREP. This guidance will, in part, come from the hosting USMA academic department.
 - (2) Serve in an advisory capacity to the ERDC VREP selection committee.
 - (3) Provide a slot in the appropriate USMA department's summer instructor training program.
 - (4) Limit the teaching load of the Visiting Research Engineer to one or two sections of one course per academic term.
 - (5) Provide support facilities to the Visiting Research Engineer at USMA to include office space, personal computing equipment, secretarial support, and use of research facilities.

(6) Seek approval to provide available quarters on West Point commensurate to those of other visiting professors IAW USMA Suppl 1 to AR 210-50, for which the Visiting Research Engineer will pay a monthly rental fee.

(7) Negotiate with the ERDC on a yearly basis USMA's contributions to help defray TDY expenses of the Visiting Research Engineer.

(8) Recognize the Visiting Research Engineer as having equal status with other visiting professors.

c. ERDC will:

(1) Chair the ERDC VREP Selection Committee.

(2) Periodically recommend, subject to USMA approval, one ERDC employee to serve as the Visiting Research Engineer for a term of residence of 11 months, usually being 1 July through 1 June.

(3) Maintain full administrative support for the Visiting Research Engineer during his/her term of residence at USMA.